



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,389	10/15/2003	Ivan Osorio	011738.00139	2112

22908 7590 08/11/2005

BANNER & WITCOFF, LTD.
TEN SOUTH WACKER DRIVE
SUITE 3000
CHICAGO, IL 60606

EXAMINER

ASTORINO, MICHAEL C

ART UNIT	PAPER NUMBER
----------	--------------

3736

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,389

Applicant(s)

OSORIO ET AL.

Examiner

Michael C. Astorino

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/15/2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4, 6, 11/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which the applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-32 are rejected under 35 U.S.C. 101 because the claim positively recites limitations that overlap statutory classes (e.g. a process and an apparatus both positively recited in the same claim). See MPEP 2173.05(p) II for more details.

The applicant recites in the preamble a system claim however in part (b) starts to claim method steps as to the computer executable instructions. The applicant can overcome this rejection by amending the claim to recite, "(b) a tangible computer readable medium having computer executable instructions...."

Additionally, the claims 15-32 are rejected under 35 U.S.C. 101 since claim 15 is directed to software, program, instructions, code, data structure, or a signal that does not recite a tangible computer readable medium. See MPEP 2106 IV B I (a).

Note to applicant: text inside the parenthetical, after each limitation provides a reference to the cited patent to support the examiner's rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Echauz et al. US Patent Number 6,678,548 B1.

Claim 1. A method for scoring a severity of sensed neurological signals relating to a nervous system disorder comprising the steps of: (a) receiving from a monitoring element a neurological signal having at least one event to be scored; (element number 20, signal acquisition)

Art Unit: 3736

(b) identifying at least one feature of the neurological signal to use in scoring; (element number 40, feature extraction)

(c) computing a score of relative severity of the event using the identified feature; (element number 50 probability estimation) and

(d) ranking the event by severity relative to at least one other scored event, (inherent via element numbers 60 and 70; multi-therapy activation decision logic block and therapy modalities via control laws and therapy actuators; also including quality of life indicators).

In regards to claims 2 and 3, see column 2, lines 22-67, column 3, lines 1-46 and lines 66-67, and column 4, lines 1-6.

In regards to claims 4-6, see column 6, lines 15-27, figure 1 “tx”, “rx”, “80 wearable access unit.”

In regards to claims 7 and 8, see abstract and disclosure on the probability vector P.
Claim 9. A method of claim 1, wherein the step of computing comprises the step of allowing a user to exclude a certain event from being scored. (the use of a manual operation of therapy is synonymous with a certain event not being scored, since the therapy would normally occur and be an aspect of the learning computing would not be integrated into the system, column 6, lines 1-14).

In regards to claims 10 and 11, see column 4, lines 26-67 and column 5, lines 1-67.

In regards to claims 12 and 13, see (element number 20, signal acquisition)

Claim 14. A method of claim 1, wherein the nervous system disorder is selected from the group consisting of a central nervous system disorder, a peripheral nervous system disorder, and mental health disorder and psychiatric disorder. (see abstract, epileptic seizure)

Claim 15. A medical device system capable of scoring a severity of sensed neurological signals relating to a nervous system disorder comprising in combination: (a) at least one monitoring element, each generating a neurological signal of a sensed neurological condition; and (b) computer executable instructions for performing the steps of (i) identifying at least one feature of the neurological signal to use in scoring; (ii) computing a score of relative severity of the event using the identified feature; and (iii) ranking the event by severity relative to at least one other scored event. (see figure 1, element number 20, 40, 50, 60, and 70)

In regards to claims 16 and 17, see column 2, lines 22-67, column 3, lines 1-46 and lines 66-67, and column 4, lines 1-6.

In regards to claims 18-20 and 32, see column 6, lines 15-27, figure 1 “tx”, “rx”, “80 wearable access unit.”

In regards to claims 21-22, see abstract and disclosure on the probability vector P.

Claim 23. A medical device system of claim 15, wherein the step of computing comprises the step of allowing a user to exclude a certain event from being scored. (the use of a manual operation of therapy is synonymous with a certain event not being scored, since the therapy would normally occur and be an aspect of the learning computing would not be integrated into the system., column 6, lines 1-14)

In regards to claims 24 and 25, see column 4, lines 26-67 and column 5, lines 1-67.

In regards to claims 26, 27 and 29, see (element number 20, signal acquisition)

In regards to claim 28, see abstract, epileptic seizure.

In regards to claims 30 and 31, see figures 1 and 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Michael C Astorino** whose telephone number is **571-272-4723**.

The examiner can normally be reached on Monday-Friday, 8:30AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Michael Astorino', with a stylized flourish extending to the right.

Michael Astorino
August 8, 2005